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# SUDS


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| Date 28.06.2026<br><br>REF: The Laurels Tongue Lane Brown Edge ST6 8UH<br><br>To be read used in conjunction with Drawing number E01: ACCESS<br><br>PLANNING APPROVAL NUM: SMD/2023/0194 | Staffordshire Moorlands District Council<br><br>Moorlands House,<br>Stockwell Street, Leek,<br>Staffordshire,<br>ST13 6HQ |

**SUSTAINABLE DRAINAGE STRATEGY (SuDS REPORT)**

**Application Reference:** SMD/2023/0194 **Site:** Land off Tongue Lane, Brown Edge, Staffordshire Moorlands **Proposal:** Single 4-bedroom self-build dwelling.

**Applicant:** Martin Edge **Date:** 28June 2026, **Condition 9 discharge.**

**1. Introduction:** This Sustainable Drainage Strategy (SuDS Report) supports outline planning permission **SMD/2023/0194** for a single dwelling at Tongue Lane, Brown Edge. The purpose of this report is to demonstrate that surface water from the development can be managed sustainably, without increasing flood risk on-site or elsewhere, and in accordance with:

- **NPPF (2023)**
- **Non-Statutory Technical Standards for SuDS (DEFRA)**
- **Staffordshire County Council SuDS Handbook**
- **SMDC Local Plan Policy SD5 (Flood Risk) and DC1 (Design)**

The site is not within a Flood Zone and has no recorded surface water flooding.

**2. Existing Site Conditions**

- The site is a **greenfield plot** with gently sloping ground falling **north-east to south-west**.
- The existing ground is permeable, comprising **sandy clay / mixed soils** typical of Brown Edge.
- There is **no connection to public surface water sewers** in Tongue Lane.
- The site is bordered by hedgerows and open land.
- A small **wildlife pond** is proposed at the lower end of the site.

**3. SuDS Design Principles**

The drainage strategy follows the **SuDS hierarchy**:

1. **Infiltration** (preferred)
2. **Discharge to watercourse**
3. **Discharge to surface water sewer**
4. **Discharge to combined sewer** (last resort)

Given the site's permeability and the proposed wildlife pond, **infiltration and attenuation on site** are viable and preferred.

**4. Proposed Drainage Strategy (Summary)**

The development will use a **three-stage SuDS system**:

**4.1 Permeable Driveway & Parking Area**

- Constructed using **permeable gravel** over a **free-draining sub-base**.
- Acts as the **primary infiltration zone** for roof and driveway runoff.
- Reduces peak flows and provides natural filtration.

**4.2 Highway Interceptor at Site Entrance**

- A **linear drainage channel** (ACO-type) installed at the entrance to the site with outline planning permission,
- EDGE Design Drawing number E01: ACCESS
- Prevents any surface water from discharging onto the public highway.
- Directs intercepted water into the SuDS system (not the road).

**4.3 Attenuation / Wildlife Pond**

- Located at the **south-east corner** of the site (lowest point).
- Dual function:
  - **Attenuation basin** for extreme rainfall events
  - **Biodiversity enhancement**
- Designed with:
  - 300–450 mm freeboard
  - Shallow shelves for planting
  - Native wetland species
- Provides storage for **1 in 100 year + 40% climate change** events.

**5. Surface Water Calculations (Concept Level)**

**Impermeable Area**

- Roof area (approx.): **120 m²**
- Hardstanding (permeable): **treated as permeable**
- Total impermeable area: **120 m²**

**Greenfield Runoff Rate**

Typical greenfield runoff for this soil type: **1–5 l/s/ha** For 0.1 ha site → **0.1–0.5 l/s** This is extremely low, so attenuation is required.

**Attenuation Volume**

For 120 m² roof area:

- 1 in 100yr + 40% CC event → approx. **10–12 m³** storage required.
- The pond provides **>12 m³** capacity.

**Discharge Rate**

- **Zero off-site discharge**.

- All water infiltrates or is stored on site.

**6. Exceedance Routing**

In extreme rainfall events exceeding design capacity:

- Water will flow **south-east** towards the pond.
- No exceedance routes direct water towards neighbouring properties or the highway.
- Finished floor levels will be set **150 mm above external ground**.

**7. Foul Drainage**

- Foul drainage will be managed via a **septic tank** or **package treatment plant**.
- Discharge will be to a **soakaway drainage field** in accordance with **Building Regulations Part H** and **BS 6297**.
- Foul and surface water systems remain **fully separated**.

**8. Maintenance Plan**

**Permeable Gravel Driveway**

- Annual brushing to prevent clogging
- Inspect for rutting or ponding

**Highway Interceptor**

- Clear debris every 6 months
- Jet-clean annually

**Pond**

- Maintain planting
- Remove silt every 5 years
- Inspect banks and inlets annually

All maintenance is the responsibility of the **homeowner**.

**9. Compliance Statement**

This SuDS strategy:

- Prevents any increase in flood risk
- Ensures **no discharge to the public highway**
- Provides **biodiversity gain**
- Meets the **Non-Statutory Technical Standards for SuDS**
- Complies with **SMDC Local Plan DC1 and SD5**
- Satisfies the drainage requirements of **Condition 9** of SMD/2023/0194

**10. Conclusion**

The proposed SuDS system is **appropriate, sustainable, policy-compliant**, and fully suitable for a single dwelling at Tongue Lane. All surface water will be managed **within the site boundary**, with **no off-site discharge** and **no impact on highway safety**.

Regards Martin Edge MIET